REMARKS

The Advisory Action alleges that amended claim 11 does not have support in the specification because there is no teaching of selecting the properties of dielectric anisotropy of 3.2 or more and selecting the ratio of the dielectric anisotropies of the liquid-crystal medium parallel and perpendicular to the director to be less than or equal to 1.93. The Advisory Action also alleges that the reference mixtures of Kondo meet these properties, referring to Examples 1, 3, 4, and 12 (apparently applicants' own examples).

As for support of these claim recitations, the dielectric anisotropy recitation is believed to be clearly demonstrated by the Examples in the original disclosure. The examples in which a dielectric anisotropy, $\Delta\varepsilon$, for the mixture is determined range from 3.2 (Examples 8 and 13) to 11.3. Further, the specification discloses that a large dielectric anisotropy is desired; see, e.g., page 2, lines 4-5. Thus, although not explicitly stated, the original disclosure provides a clear description to one of ordinary skill in the art of an embodiment of the invention wherein the dielectric anisotropy is 3.2 or higher.

The ratio of the dielectric anisotropies of the liquid-crystal medium parallel and perpendicular to the director being less than or equal to 1.93 is also supported by the original disclosure and the examples. The original disclosure states that "the dielectric constant perpendicular to the molecular axis ($\varepsilon_\perp$) must thus be as large as possible." See page 3, lines 27-28. A larger $\varepsilon_\perp$ equates to a smaller ratio of $\varepsilon_\parallel/\varepsilon_\perp$ since $\varepsilon_\perp$ is the denominator in the ratio. Although specific such ratios are not recited in the original disclosure, they are an inherent property of the mixtures disclosed in the examples. The $\varepsilon_\parallel$ and $\varepsilon_\perp$ values are inherent in all liquid crystal mixtures and, thus, their ratio is an inherent property in all liquid crystal mixtures. Those inherent properties are determined and given in the Declaration under 37 C.F.R. § 1.132 of Dr. Heckmeier in manner which could have easily been

determined by one of ordinary skill in the art at the time of the invention. Of the 14 examples, 2 have a ratio of 1.93 and all but 2 of the others have a lower ratio. Thus, the inherent ratio properties of the examples provide support for the embodiment wherein the ratio is 1.93 or less. An inherent property of a composition can properly support a claim recitation even if it is not literally recited in the original disclosure; see, e.g., *Kennecott Corp. v. Kyocera International Inc.*, 5 USPQ2d 1194, 1198 (Fed. Cir. 1987) *Ex parte Cure*, 215 USPQ 567 (POBA 1982).
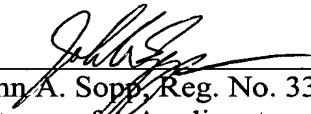
Regarding the allegation that the Kondo mixtures meet these recitations, applicants respectfully disagree. The Office Action refers to Examples 1, 3, 4, and 12 but these apparently do not refer to the examples of Kondo since the Kondo examples of these numbers have no disclosure at all as to the combination of dielectric anisotropy and the ratio property. It seems that, possibly, the Office Action is referring to Examples 1, 3, 4 and 12 of the instant specification. These are the examples of the specification which are no longer within the claim scope, i.e., they do not meet the dielectric anisotropy or ratio of the dielectric anisotropies parallel and perpendicular to the director properties of the instant claims. However, that these examples are no longer within the instant claims does not mean they are prior art. Applicants see no connection between these examples of their own specification and what Kondo teaches. As can be seen in the 37 C.F.R. § 1.132 declaration, two representative examples of Kondo were compared and they do not meet the recitation in applicants' claims of the ratio of the dielectric anisotropies parallel and perpendicular to the director.

For the above reasons, and for those previously made in the Reply entered concurrent with the RCE filing, it is urged that the instant claims are supported by the original disclosure and are allowable over the prior art.

It is submitted that the claims are in condition for allowance. However, the Examiner

is kindly invited to contact the undersigned to discuss any unresolved matters.

The Commissioner is hereby authorized to charge any fees associated with this

response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,

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